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Design/Consulting Services

281 Smiley Drive St. Albans, WV 25177 Phone: (304) 755-0075 Fax: (304) 755-0076 www.ZDSDesign.com



MECHANICAL

ELECTRICAL • INDOOR AIR QUALITY

ENERGY

COMMISSIONING

FORENSIC

May 4, 2017

WV Department of Administration Purchasing Division 2019 Washington Street, East Charleston, WV 25305-0130

Re: Expression of Interest to provide Professional Engineering Services for the Blackwater Falls State Park Lodge Boiler Replacement Project

Please accept our Expression of Interest (EOI) to provide Professional Engineering Services and related work for the boiler replacement at *Blackwater Falls State Park*.

ZDS Design/Consulting Services was founded in 1994 and is located at 281 Smiley Drive, St. Albans, WV 25177. The project will be assigned to ZDS' principal-in-charge of planning/design who will follow the Project from inception through design and has full authority to execute a binding contract on behalf of ZDS: Todd A. Zachwieja, PE, CEM, LEED AP - Principal and CEO; Telephone: 304-755-0075; Mobile: 304-545-4550; Email: Todd.Zachwieja@ZDSDesign.com Website: www.ZDSDesign.com. Refer to Section II for a brief description of ZDS' Organization and Services.

ZDS founding members have over six decades of experience in WV renovation projects and are recognized for our specialties in mechanical design, electrical design, indoor air quality services. energy conservation/performance contracting, commissioning services and Codes' compliance for Governmental, Commercial, Educational, and Health Care facilities. We have successfully incorporated phased construction in facilities to reduce potential disruptions as necessary to allow adjacent spaces to remain occupied and functional. ZDS' experience involves hundreds of projects including working with many state and federal agencies and our professionals are dedicated to performing quality services with the goal of meeting our clients' needs, scheduling and budgets. Many of our past projects include boiler systems' design for both new and renovation work.

If structural engineering services become necessary for this project we propose to involve Carol A. Stevens, P.E., President of CAS Structural Engineering, Inc. We have successfully teamed with CAS for many years and Ms. Stevens has over 25 years of experience with building structures in West Virginia having worked on many projects for the WVDNR.

ZDS is the only MEP engineering firm in West Virginia to design and receive the EPA's Energy Star® Certification for three (3) renovation facilities in West Virginia in the same year. These buildings perform in the top 25 percent of similar facilities nationwide for energy efficiency while meeting stringent ASHRAE standards. We met the facility requirements while providing very energy efficient HVAC, lighting and power systems.

ZDS approach is different than the traditional role as we have actual operational experience and can design/commission the Mechanical systems. By commissioning the systems, we fine-tune them to actual conditions and assist the Owner's personnel after occupancy to improve comfort, provide training and reduce operating costs. We have worked in 24 states but our home and corporate offices are in West Virginia.

EOI Section Three - Qualifications and Experience: ZDS' employs the team approach when providing engineering services beginning with our meeting with the Client to review their proposed project scope, concerns, budgets and schedules. ZDS will take into consideration the initial meetings' conversations, our findings during onsite visits and discussions with the operations/maintenance staff to compile a tentative overall plan that will address the desired result with the goal of staying within budget and on schedule.

Planning and design meetings are important to keep the interested parties informed on the direction of the project. We firmly believe that many levels of the Client's staff should be involved with a successful project including the designated Owner's Representative, budget supervisor, operating and maintenance staff and others impacted by the decisions. Recognizing that the maintenance and operating staff live with the design long after the project's completion we listen to, and work with, those who will continue to operate and maintain the equipment. In addition to the Owner's personnel it will be important for the project meetings to include necessary regulatory agencies and other consultants that may be involved. An agenda can be prepared for meetings to more efficiently stay on track for project specific issues. Minutes of each critical meeting noting decisions and direction provided will be prepared and issued to all attendees, as well as other pertinent parties, to keep the development of documents moving in the right direction. Our belief is that proper communication benefits the client throughout the evaluation, design process, construction and beyond.

We will develop a preliminary budgetary cost estimate based on the initial scope to determine if modifications or alternative solutions may be required to reduce the cost. Throughout the design process we will periodically update the costs to reflect any changes in direction of the Project. At a minimum these updates will occur at each design milestone: Schematic Design, Design Development and Construction Documents. Cost estimates will be prepared in a clear and concise method and shared with all team members for potentially necessary decisions. ZDS employs an extensive library of historical costs from past projects combined with RS Means construction cost manuals and, at times, have also reviewed the proposed work with trusted contractors/subcontractors as another method of checking our estimated costs. We utilize quality control on every project as an effort to maintain schedules and stay within the stipulated budget. Peer review of the design process involving various members of our design team is an important step in the process and coupled with our previously mentioned cost estimating resources will result in a better project for the Client.

Refer to **Section III** for related project experience and **Section IV** for **ZDS'** staff resumes.

Our current understanding is that the *Blackwater Falls State Park Lodge* now has two (2) York-Shipley forced draft low pressure (LPS) steam boilers that were installed during the original construction in 1956-58. The boilers utilize #2 fuel oil (diesel) that is stored at the site in an aboveground 4000-gallon storage tank. Our understanding is natural gas service isn't available and fuel oil is being used to fire the boilers. The facility has two (2) steam-to-hot-water converters that use steam from the boilers to develop heating hot water that's distributed throughout the facility via zone pumps and piping systems serving baseboard heat and radiators.

The LPS is also utilized to provide heating for an Air-Handling-Unit (AHU) serving the Cafeteria/kitchen area but not utilized anywhere else within the Lodge. The boilers are well past their expected operational age being nearly 60 years old and require replacement.

ZDS successfully incorporates energy efficient solutions into boiler replacements like this project that reduce heating operating costs 30% or more. Our designs have qualified for EPACT that required 50% reduction in energy usage over facilities designed to ASHRAE 90.1-2001. We will perform a thorough field investigation of the facility, specifically targeting the boilers, converters, pumps, piping systems and end-use equipment to better understand the existing systems and the potential impact that any remedial solutions may have on other infrastructure within the facility and present opportunities that can reduce long-term operating costs.

Our evaluations and designs have included <u>hundreds of boiler systems</u> for entire facilities of various occupancies, both new and renovation work, so we have the experience and background to address this project. **ZDS** will request copies of any existing documentation available for our review and use in preparing a feasible approach to the Project. We will analyze and compile the information received/found to determine potential solutions to review with the Owner. The final Construction Documents will be reviewed with Owner's personnel for approval before issuing for bids. **ZDS** will be available for assistance during Bidding and Negotiations and can provide full Construction Administration services throughout the construction process.

ZDS Design/Consulting Services has registered professionals that can effectively execute the requirements of MEP projects and believe that our experience makes us the most qualified to work on your facilities. Below is a partial listing of the proposed **ZDS**' staff for this Project.

Todd A. Zachwieja, CEO, Principal-in-Charge.

Ted A. Zachwieja III, Chief Technical Officer.

Jim Watters, Production Manager/Associate.

Paul O'Dell, Senior Engineer.

Larry A. Weese, Sr. Technical Analyst.

ZDS personnel have worked on hundreds of projects in West Virginia including many with Governmental agencies. We encourage you to call the references listed below, as well as Mr. Rudy Raynes of the West Virginia State Fire Marshal's office to establish how well we worked with their staff, our technical strengths and our ability to work with contractors to provide a quality project.

- Mr. Mike Pickens, Executive Director, WV Dept. of Education, 1900 Kanawha Blvd. East, Bldg.
 Room 215, Charleston, WV 25305 (304) 558-2711, mepicken@k12.wv.us. Involved with dozens of boiler replacement/MEP projects in West Virginia since the 1990's.
- Mr. Ron Adkins, Construction Manager for WVDHHR, One Davis Square, Suite 100, Room 103, Charleston, WV 25301 (304) 634-9379, ron.adkins@wv.gov and former Project Manager for the \$43 million WV Air National Guard project. Construction Manager for DHHR facilities since 2011 including \$45.5 million addition/renovations to William R. Sharpe, Jr. Hospital, Weston, WV.

- 3. Mr. Greg Nicholson, Retired Chief Operations Officer, WVDHHR, Charleston, WV (304) 552-0101, gregnicholson@suddenlink.net Involved with seven hospitals consisting of multiple projects at each facility.
- 4. Mr. David Sneed, retired Executive Director of SBA, (304) 545-5843, Worked on dozens of MEP projects in West Virginia since 1990's.
- 5. Mr. Gary Boyd, Director of Facility Services, University of Charleston, 2300 MacCorkle Avenue S. E., Charleston, WV 25304 (304) 357-4871, garyboyd@ucwv.edu. Worked on projects at both WVU and UC involving boilers/MEP systems since 1990's.

ZDS has an excellent track record of completing projects on time and in budget and we are ready and willing to start on your project. If the State of WV trusted ZDS to design the central boiler plant for the entire State Capitol Complex, we feel confident that our specialties will provide you with the best expertise to provide economical solutions for your facility and look forward to discussing our qualifications. If there are any questions, please do not hesitate to call.

Sincerely,

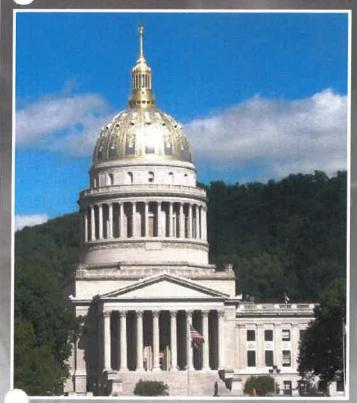
Todd A. Zachwieja, P.E., CEM, LEED AP

Principal, Chief Executive Officer

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COMPANY OVERVIEW







ABOUT ZDS DESIGN/CONSULTING SERVICES

In 1983, Todd A. Zachwieja founded ZECO Consultants. In 1994 ZDS Limited Liability Company was incorporated in West Virginia using dba ZDS Design/Consulting Services, and was founded to provide design and consulting services.

Each new project is assigned to a principal in charge who will follow the project from inception through commissioning. ZDS assigns the production staff according to the nature of the project and the work force necessary to meet the schedule. The principal in charge of that project determines if consultants are needed and coordinates all areas. After bidding, a principal of ZDS coordinates visits to the job site regularly, all the way through the post-warranty inspection. ZDS believes in the team approach when providing engineering design and consulting services. We start with our client as the number one member on our team. We listen to the needs and concerns of our client and that becomes the basis for our design.

COMPANY LEGAL NAME

ZDS Limited Liability

Company dba ZDS Design/Consulting Services

LOCATION OF INCORPORATION

West Virginia

FOUNDERS

Todd A. Zachwieja, P.E., C.E.O.

Lori L. Zachwieja, C.P.A., C.F.O.

Daniel H. Kim, Ph.D.

OFFICE

281 Smiley Drive, St. Albans, WV 25177

EMPLOYEES

ZDS currently employs design professionals covering all aspects of our services.



COMPANY OVERVIEW

CLIENTS

- Charleston Area Medical Center
- Charleston National Bank/Chase
- Concord University Nick J. Rahall II Technology Center
- District 2 Headquarters' Building HVAC Renovations
- General Motors North America Operations
- Harvard University Arboretum
- IMC Data Center, WV
- Kanawha County Commission Courthouse/ Judicial Annex Renovations/Additions
- Laidley Towers, Charleston, WV
- Marshall University: Harris Hall & Smith Hall
- Meadowbrook & Burnsville Rest Areas
- Mercer County Courthouse
- Pocahontas Community Center
- St. Patrick Church Renovations, WV
- Tucker County Courthouse

- University of Charleston
- Veterans Administration
- Webster County Development Authority
- Webster County Schools
- White Sulphur Springs Welcome Center
- WV Air National Guard
- WV Army National Guard
- WV Dept. of Education
- WV Division of Energy
- WV Dept. of Transportation
- WV Dept. of Health & Human Resources
- WV Division of Culture and History Renovations
- WV Division of Protective Services
- WV General Services Administration Capitol Complex
- WV Higher Education Policy Commission
- WV Parkways Authority HVAC Renovations
- West Virginia University

ZDS provides comprehensive design services. We have experience and specialties in indoor air quality, energy management and commissioning, along with traditional mechanical and electrical design experience dating back as far as 1958. We offer a complete package. ZDS works with all levels of the client's staff: the building owner, budget supervisor, operating and maintenance staff and others impacted by the project. We recognize that the maintenance and operating staff live with the design long after the project's completion. We listen to and work with those who will continue to operate and maintain the equipment. We find that proper communication benefits the client throughout the design process and beyond.

The ZDS design team provides a total system evaluation for cost-effective selection, installation, and ease of maintenance for both new systems and retrofit of inplace systems. Design begins with our client. Our staff meets with our client to review their concerns, budgets and schedules. The ZDS design team reviews the entire picture, and ends with "A Total Design."

The ZDS staff has the expertise with codes and standards. We have extensive experience in conducting engineering code surveys of existing facilities. Our staff has excellent working relationships with the West Virginia Fire Marshal's Office, West Virginia Department of Education and the West Virginia School Building Authority. In addition to comprehensive Engineering services from an experienced design team, another major consideration in the selection of your engineer and design staff should be their track record.

ZDS' organization has an unbeatable, long running, and well-known track record for meeting our clients' needs, on time and within budget, with outstanding quality. ZDS views these characteristics as the foundation of Quality. We look forward to the opportunity to discuss our ideas with you and assist you by providing solutions for your needs with full range of services from Planning to Commissioning.

State of West Virginia Capitol Complex



Engineering planning and design for *central heating plant*, DDC controls, Air Handling Unit replacements and retrofits, operating and maintenance, training, heat recovery, fuel conversion, VFD's, variable water volume pumping, *steam/heating hot water* and chiller optimization.



Building #3



Building #4



East Wing and West Wing



The Culture Center renovations are estimated to <u>save nearly</u> \$153,000 annually over the costs of operating the old system.

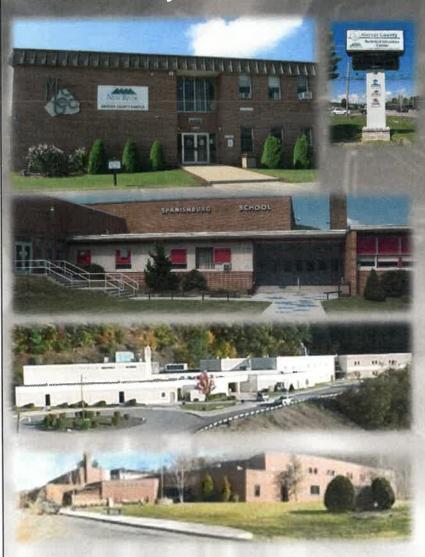
Engineering master planning, energy analysis, Mechanical/Electrical/Fire Protection design, bidding and construction which included a **New Boiler Plant**.



Mercer County Schools Boiler Replacements Projects

Lashmeet Matoaka Elementary School, Spanishburg School, Montcalm High School & Mercer County Vo-Tech Center





The first WV DEP grant funded school project in West Virginia to replace coal fired boilers with gas/propane fire boilers. The schools included Lashmeet/Matoaka, Spanishburg, Montcalm High School, and Mercer County Vo-Tech Center.

The project was a collaborative effort between the WV DEP office, WV Department of Education, the WV School Building Authority and Mercer County Schools. ZDS assisted in using the WV DEP Grant to successfully secure SBA funds, improving the indoor air quality for the four schools by reducing pollution around them.

The customized boiler design met challenging WV DEP emission requirements and provides energy efficient heat for the schools. The projects were such a success that ZDS was later hired as an expert witness for the Department of Justice addressing coal fired boiler plants in 12 schools located in Maryland and Pennsylvania.

Project Costs

\$1,912,266

Completed in 2014

Contact:

Ms. Leslie Wellman, Director of Purchasing; (304) 487-1551 Mr. Gary Bailey, Maintenance Director; (304) 487-3032

Mr. Mike Pickens, WV Dept. of Education,

Executive Director Office of School Facilities; (304) 558-2711



Design/Consulting Services

WV DHHR

Jackie Withrow Hospital Boiler Plant Renovations



Heating Project	\$1,907,000 408,820 ft ²		
Total Sq. Footage			
Date Completed	2011		

the Prime for this project. Renovations included creating a central boiler plant at one end of the large facility which included three 3,000 MBH, 125 psi steam boilers with upgrades the condensate return system and comprehensive steam upgrades. trap providing a new gas service to the new boiler plant. The existing boiler plant in the opposite end of the large facility was upgraded to lengthen the life of it including a 2,500 MBH steam boiler. Several old or poor condition boilers were removed or isolated from providing heat to the system. The natural gas service upgrades were coordinated through the State Fire Marshal for approval to meet emergency backup fuel needs required by current code for both heating and emergency power.

ZDS' initial work addressed their fire alarm needs in 2003. ZDS was contacted again in 2010 to provide master planning, boiler system upgrades and ARRA funded lighting upgrades. The boiler plant optimization initial phase involved replacing underground piping between the central plant and hospital, along with comprehensive steam trap upgrades. This required engineering planning, design, supervision, preparation of construction documents, specifications, and construction administration of the boiler systems including lighting upgrades with replacement of T-12 lighting fixtures and incandescent lights with energy efficient T-8/T-5 and LED lighting, reducing lighting energy usage by over 30%.

WV DHHR

Hopemont Hospital Boiler Plant Renovations



ARRA Renovation	\$760,000	Completed in 2011 Completed in 2003	
Fire Alarm	\$175,000		
Total Sq. Footage	124,800 ft ²		



WV DHHR

William r. Sharpe, Jr. Hospital HVAC Renovations



prime consultant for was the renovation work including Engineering Planning, analysis, Master energy Mechanical, Electrical, and Fire Protection construction bidding and design. administration services for retrofitting the 212,000 ft2 Hospital and consultant for all MEP engineering for the 32,000 ft² addition. This Project encompassed upgrades to the Central Utility Plant that included three (3) new dual-fired natural gas/fuel oil boilers, a new 15,000 gallon fuel oil storage tank, pumps, accessories and piping.

Phase I HVAC	\$ 1,403,000	Completed in 2011	
ARRA Funded Lighting Upgrade	\$ 618,700	Completed in 2011	
Comprehensive Renovation	\$30,000,000	Completed in 2017	
Addition Project	\$13,500,000	Completed in 2014	







Mercer County Schools Princeton Middle School HVAC Renovations

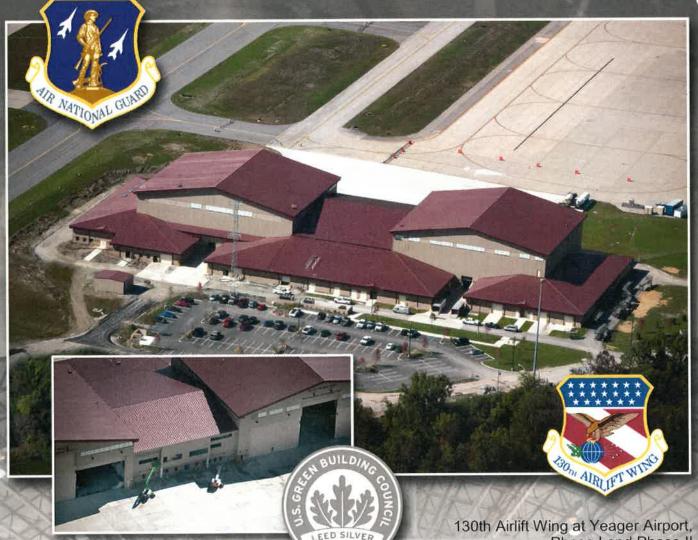
Currently under design for upgrading the schools HVAC systems to improve Indoor Air Quality and comfort while providing air conditioning for classrooms.

Princeton High School Project Costs	\$1,786,000	Completed in 2012	
Princeton Middle School Estimated Project Costs	\$3,265,000	Currently under Design by ZDS	

Contact: Ms. Leslie Wellman, Director of Purchasing; (304) 487-1551 Mr. Gary Bailey, Maintenance Director; (304) 487-3032



West Virginia Air National Guard



ZDS worked with the West Virginia Air National Guard on the Commissioning for their new Replacement Aircraft Maintenance Hangar and Shops plus a new Fuel Cell Hangar. This facility included a larger maintenance hangar, miscellaneous maintenance shops, central boiler plant and chiller plant. The project successfully achieved LEED Silver Certification with commissioning being an integral part of that certification.

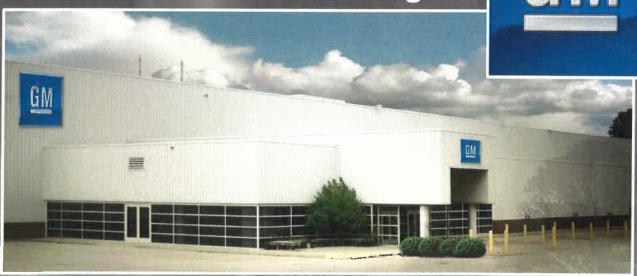
130th Airlift Wing at Yeager Airport,
Phase I and Phase II
Aircraft Maintenance Fuel Systems
Hangars and Shops
Awarded LEED Silver Certification

Construction Costs: Project Size: \$43,000,000 128,715 ft²

"ZDS's commissioning services were invaluable in helping us understand our facility and ensure the systems were installed as intended and optimized for long-term operating benefits. We would recommend them again!" Captain Harry Netzer, WVANG Project Manager



General Motors Corporation Retro - Commissioning





ZDS Design/Consulting Services and Facility Dynamics Engineering worked with General Motors (GM) Corporation's Worldwide Facilities Group on the Retro-Commissioning Program for GM's North American Facilities. The first phase of the program involved analyzing the HVAC systems within nine existing plants to determine deficiencies and opportunities to improve comfort, Indoor Air Quality, extend the life of existing equipment, and reduce operating costs.

HVAC planning and full upgrades; DDC/PLC controls; stream lining operating and maintenance procedures; heat recovery; fuel conversion; training; VFD's; variable water volume pumping; steam boiler system optimization; and chiller optimization.

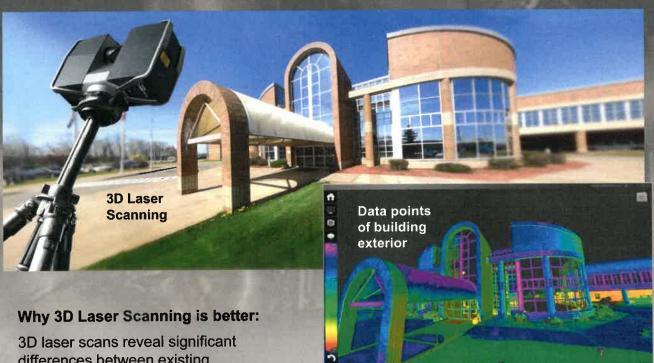


Retro-Commissioning Program Size North America Operations Facility Size Energy and Operating Savings \$400,000,000 Encompassing 160 Facilities Over 350,000,000 ft² Millions of dollars per major facility



BIM - 3D Digital Imaging

Our 3D Laser Scanning Services helped William R. Sharpe, Jr. Hospital document existing conditions and integrate their 50-bed addition.



differences between existing conditions and the original drawings.

3D laser scans also provide superior details by capturing data that is more comprehensive and precise than conventional methods.



"With the 3D laser scanning service, **ZDS** saved us countless hours communicating to all project team members, even to those who work or live far away.

Also, we now have an accurate record of the existing conditions that DHHR can easily access now and into the future."

Greg Nicholson, DHHR Chief Operations Officer

Web Share:

3D laser Scanning allows facility owners to view and measure areas with others on their planning and construction team.



Ted (Todd) A. Zachwieja, P.E., CEM, LEED AP CEO, Principal-in-Charge M/E/P/FP Design and Commissioning

Todd has over 38 years of experience involving the analysis, design, construction management and specifications for mechanical engineering, heating, ventilating, air conditioning, plumbing, fire protection, electrical and lighting, as well as indoor environmental quality analysis, building system commissioning and forensic engineering for educational, governmental, military, commercial, industrial and health care clients. He is also recognized as a campus master planner for utility infrastructure providing master planning at many Universities, hospitals and including the State of WV Capitol Complex.

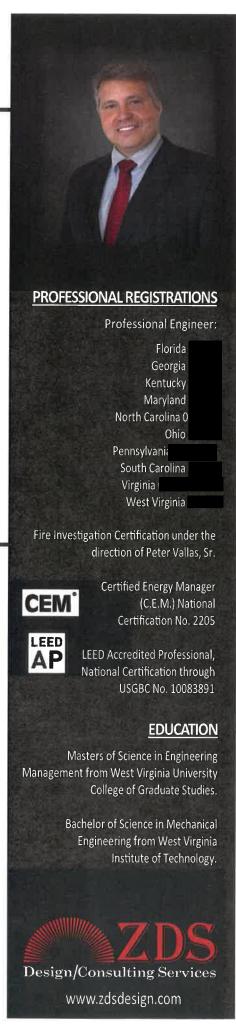
Prior to starting a consulting engineering firm, Todd Zachwieja coordinated comprehensive energy conservation programs resulting in annual energy savings of millions of dollars. He has managed a profitable regional office for one of the country's largest energy companies that service the southeastern United States. Todd also developed computer modeling programs for building energy analysis and monitoring. He has been invited as an industry leader to present technical papers and speak at professional conferences both regionally and nationally.

Todd selected and designed the pilot project for one of the largest geothermal heat pump applications in the Eastern US including designing custom geothermal rooftop AHU's. He has retro-commissioned HVAC systems for millions of square-feet for facilities located in 10 states. He has been involved with many commercial structures including high-rise commercial building renovations. Todd designed renovations to many existing schools which received *Energy Star Certifications* placing them in the nation's top 25% of energy efficiency schools. *The College Planning and Management Magazine* featured Todd and his work with a major University for the performance contracting programs that save millions of dollars in energy and operating costs. Most projects also qualified for EPAct which requires buildings use over 50% less energy than buildings designed using ASHRAE 90.1.

GOVERNMENT/COMMERCIAL EXPERIENCE

- Bank One, WV
- Bayer Material Science, WV
- Calvert County Aquatic Center, MD
- Culture Center, HVAC & Fire Protection
- General Motors Corp. Re-commissioning
- Jackson County Courthouse Annex
- Kanawha County Commission: 120,000 sf additions/renovations for the Judicial Annex/Kanawha County Courthouse
- Kanawha County Public Library
- Kohl's
- Laidley Towers, Charleston WV
- Mercer County Courthouse Annex
- Olin Corporation
- Phillip Morris USA
- Pendleton County Courthouse & Annex
- Public Service Commission of WV
- Rhone-Poulence
- Robinson Grand Theatre, Clarksburg WV

- Santa Anna Federal Building, CA
- St. Patrick's Church, Weston WV
- WV Capitol Complex Central Heating Plant
- Sear
- Toyota Motor Manufacturer, WV Inc.
- Union Carbide/DOW
- United Center, Charleston WV
- Walker Machinery
- WV Air National Guard including Cx \$45M Fuel Cell/ Maintenance Hangars at Yeager Airport for LEED Silver
- WV Army National Guard
- WV Department of Transportation/DOH
- WV Division of Protective Services
- WV Higher Education Authority
- WV General Services Division
- WV Public Service Commission Headquarters
- WV State Capitol Complex renovations
- Yeager Airport



Ted (Todd) A. Zachwieja, P.E., CEM, LEED AP

CEO, Principal-in-Charge M/E/P/FP Design and Commissioning

PROFESSIONAL AND COMMUNITY AFFILIATIONS

Member of Investigative Engineers Association (I-ENG-A) and founder of I-ENG-A of the Tri-State Region

Past President 2013-14, current Governor - WV ASHRAE Chapter, Served as ASHRAE's Energy and Technical Affairs Chairman for six years. Recognized by ASHRAE Region VII in 2014 with the David Levine Award of Excellence, Presidential Award of Excellence,

Recognized by the International Who's Who of Professionals

Recognized nationally as West Virginia's Business Man of the Year

Recognized by AEE nationally in 2007 as a Legend in Energy

Recognized by AEE nationally in 2008 as a Charter Legend in Energy

Charter Life Member of the Association of Energy Engineers

Professional Affiliate Member of the American Institute of Architecture

Associate Member West Virginia Society for Healthcare Engineering

Member of the International Code Council

Member of the National Society of Professional Engineers

OTHER RECOGNITIONS

Selected by WVU and the WV Division of Energy to train Code officials and the design community on ASHRAE 90.1 State Energy Code

Presented at regional and national conferences including the annual National System Commissioning Conference

Contributing editor and served on the Editorial Review Panel for "The Handbook of Building Management and Indoor Air Quality"

Contributing editor "Ventilation for a Quality Dining Experience"

Contributing editor and served on the Editorial Review Panel for INvironment Professional, Power Prescriptions and other publications and articles featuring Indoor Air Quality (IAQ) and MEP engineering systems

Energy Star Certified for facilities in the nation's top 25% of energy efficiency

1st Place 2014 ASHRAE Technology Award, Region VII

LEED Silver Certified WVANG Fuel Cell/Maintenance Hangar, Charleston, WV

LEED Gold Certified Harvard Arboretum, Boston, MA

First ASHRAE bEQ certified building in West Virginia, 2015

























Ted Zachwieja III, P.E., CEM

Chief Technical Officer

Ted has over 14 years of experience in building construction design industry. His strategic thinking and development of technical resources at ZDS has helped streamline design processes and improve quality of work office wide. Ted is an innovative problem solver in engineering design, communication methods and management of BIM models between stakeholders during a design project. As a pioneer and a believer in technological processes Ted has championed Integrated Design Practices that has become the fabric of ZDS's day to day operations.

Ted developed ZDS's 3D Scanning services which have assisted in collecting key existing conditions for renovation projects, forensic engineering, historical preservation, and high definition reality capture. Ted has in depth experience on collection, registration, and scan to BIM processes. He has provided training and developed materials for best practices when using 3D scan data. Ted's 3D scanning experience includes governmental, educational, health care, industrial, and commercial facilities. He also has experience in speaking on how 3D laser scanning impacts our industry today.

Ted develops, designs and manages the IT systems. The experience encompasses development and deployment of central server systems to networked client computer systems, strategic development for ZDS' Integrated Design Processes, and research and development into new technologies to continue staying on the cutting edge for ZDS and others.

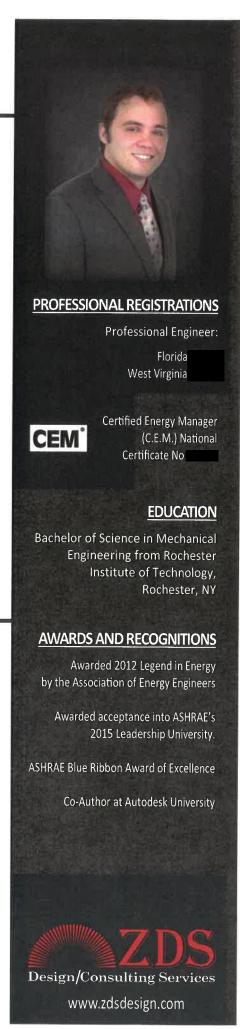
Ted's project experience includes design and commissioning for heating, ventilating, air conditioning, plumbing, fire protection, electrical and lighting systems for educational, health care, industrial and commercial facilities. His experience encompasses working both on new construction and renovation projects. He also is experienced in historical facilities including theatrical.

Ted maintains an active membership to the ASHRAE professional society and also has a lifetime membership to the Association of Energy Engineers. He maintains an active continuing education towards today's standards and codes as well as participates in ASHRAE at both a local and society level. He was recently appointed to the Electronic Communications Standing Committee with ASHRAE.

GOVERNMENT/COMMERCIAL EXPERIENCE

- WV Air National Guard Maintenance Hangar and Fuel Cell Hangar, Charleston, WV – LEED Silver Certified
- Bayer Material Science
- Catholic Church of Ascension, Parish Hall Renovations
- Coal Heritage Trails Center Renovations
- Kanawha County Judicial Annex HVAC Renovations
- Meadowbrook Rest Areas
- I-70 Welcome Center
- CASCI Building, Charleston WV
- Morgantown Welcome Center
- Pocahontas County Community Center

- Robinson Grand Theatre, Clarksburg WV
- Servia Rest Areas
- St. Patrick's Church, Weston WV
- Stonewall Jackson Marina
- University of Charleston Innovation
 Center Additions/Renovations
- William R. Sharpe, Jr. Hospital Additions/Renovations
- WV Parkways Authority, Toll Booth
- WV State Capital Complex Central Heating Plant
- White Sulfur Springs Rest Area
- Numerous K-12 School Renovations



James E. Watters

Associate - Production Manager

Jim has nearly 40 years' experience in design and implementation of HVAC, plumbing and electrical systems including nine years in the construction industry. He has a comprehensive knowledge of construction documents, contracts, and development of cost estimates, budgets and schedules. Jim's strengths reside in his ability to manage projects and people in an organized and cost-effective manner. Jim has been involved with the design and production of mechanical and electrical drawings including HVAC, plumbing, fire protection, lighting, electrical power and specialized systems. He has worked with and managed engineers in projects for health care, educational and commercial buildings in the states of West Virginia, Florida, Maryland, Pennsylvania, Ohio, Kentucky, Virginia, Georgia, New York, Arizona, Illinois and Massachusetts.

Jim has extensive experience in energy savings' programs for HVAC, plumbing and electrical systems in hospitals, state and government office buildings, school systems, and manufacturing facilities, as well as managing performance contracts for a large facility's campus totaling \$10,000,000 in construction costs on various projects, including the conception, design and construction administration for the installation of a 1.5 Megawatt emergency generator. The propane-fired generator and associated switchgear in conjunction with 60,000 gallons of propane fuel storage served to provide peak shaving/load shedding to save on the campus utility costs as well as emergency power functions. Through the years, Jim has researched and implemented into practice International Building Codes, NFPA Codes, National Electrical Codes, Life Safety Codes, IES standards, AIA Guidelines for Design and Construction, and ADA guidelines. His involvement in construction through the years has been mainly from the design side of the industry with a 9 year stint working for a contracting firm at the turn of this century. His experience includes coordinating with Architects, Owners and Agencies including an excellent relationship with the office of State Fire Marshal.

GOVERNMENT/COMMERCIAL EXPERIENCE

- Bluefield Area Transit Authority Administration and Maintenance Facility design.
- Boyd County, Kentucky Judicial Center
- Chase Towers (formally Charleston National Bank)
- Department of Transportation Rest Area prototype
- Department of Transportation Welcome Center prototype
- Fenway Park in Boston Lightning Protection/Grounding Study
- Glenville State College
- I-70 Welcome Center
- Jackson County Libraries Renovations
- Kanawha County Commission Judicial Annex Renovations
- Meadowbrook Rest Areas North and South Bound
- Morgantown Welcome Center
- Redmond House Renovations design

- Rhone-Poulenc New Admin. offices
- Robinson Grand Theatre, Clarksburg WV
- Sacred Heart Pavilion and Daycare Ctr.
- St. Patrick's Church, Weston WV
- Shawnee Park Clubhouse
- Stonewall Jackson Marina Renovations
- Tucker County Board Office Boiler Retrofit
- Tucker County Courthouse Renovations
- WV Air National Guard Commissioning for \$43 million maintenance and fuel cell hangars – *LEED Silver Certified*
- WV Department of Military Affairs and Public Safety Maintenance Facility in Eleanor
- WV Department of Transportation Burnsville Rest Area (AIA Merit Award Recipient) and Domestic Water Pumping Station
- WV Division of Culture and History Fire Alarm/Sprinkler upgrades
- White Sulphur Springs Welcome Center



Paul S. O'Dell, P.E.

Senior Project Engineer

Paul has over 21 years of engineering experience involving the analysis, design, project management, specifications' writing and construction management on many projects throughout the region. This experience includes heating, ventilation, air conditioning (HVAC), plumbing, electrical systems and lighting for governmental, commercial, educational, healthcare, industrial and military facilities. He also has knowledge and experience with indoor environmental quality assessment, recommended remedial work and design of the necessary modifications in various types of buildings.

Paul assisted in the design and implementation of the pilot project for one of the largest geothermal heat pump systems in the mid-Atlantic region. He has also been involved in the design of facilities that have received the Energy Star Certification placing them in the nation's top 25% in energy savings for similar buildings and systems as well as his contribution as part of a large team effort performing mechanical systems' retro-commissioning at numerous automotive manufacturing facilities in North America.

His project experience is wide-ranging and includes the development of scope, design criteria and budget conscious designs. Working with other design professionals and through rapport with the clients he has conducted design peer reviews, construction budget and project schedule overview, Construction Administration and closeout of projects.

COMMERCIAL/GOVERNMENT EXPERIENCE

- WVARNG Armory/Annex
- Bruceton Bank
- Bank One
- Cultural Center
- Cuissets Residence
- Camp Dawson Barrack/mess hall
- DOT Huntington District II Headquarters Renovations
- Yeager Airport Terminal Expansion/ Renovation
- DOH Testing Lab
- GMC Lordstown Assembly Plant
- GMC Janesville Assembly Plant
- GMC Pontiac East Assembly Plant
- GMC Bowling green Assembly Plant

- GMC Arlington Assembly Plant
- Harrison County Bank
- IMC Office Bldg.
- WV Capitol Complex Central Boiler Plant
- Kanawha County Commission Judicial Annex Additions/Renovations
- Appalachian Tire
- Laidley Towers, Charleston WV
- USDA Forestry Building
- University of Charleston Innovation Center Additions/Renovations
- William R. Sharpe, Jr. Hospital Additions/Renovations
- Numerous K-12 School Renovations



Larry A. Weese

Sr. Technical Analyst

Larry has nearly 26 years of experience providing design and Construction Administration services in mechanical, plumbing, fire protection and various electrical systems. His experience encompasses a broad range of Projects including, but not limited to, Commercial, Government, Healthcare, Educational and Industrial facilities. These Projects over the years have ranged extensively from small to large in terms of both physical sizes and construction budgets.

Larry's primary strengths are in the design and implementation of piping systems including all domestic water, sanitary waste/vent, storm water and natural gas combined with an expertise in water heating systems, boilers, pumps, recirculating systems, Thermostatic Mixing Valves, etc. Other strengths include a good understanding of the design and layout of HVAC systems, fire protection/sprinkler systems, lighting and other electrical systems. He consistently stays current with applicable Codes and national, as well as local, standards and regulations.

He has a good awareness of all aspects of the design process and how the various disciplines need to be coordinated to avoid conflicts during construction. Larry has maintained growth as technology has changed throughout the years in the field of engineering design and drafting standards beginning with ink drafting on paper, varying degrees of CAD drafting and currently BIM/REVIT.

Working on multiple National Guard projects in recent years he has experience and understanding of the United Facilities Criteria Code 3-600. Many of the facilities utilized gas-fired instantaneous water heating systems and vehicle service bays that incorporated numerous piping/tubing systems for air, grease, oil and other fluids.

Larry's experience with site utility design and coordination with the associated utility is a valuable asset on all projects, whether new construction or extensive renovations.

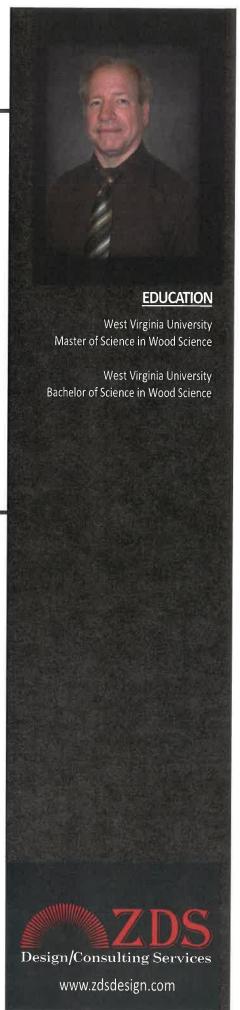
GOVERNMENT/COMMERCIAL EXPERIENCE

- · Bobcat of Advantage Valley Facility
- Charleston Fire Station
- Diamond Electric
- Dow Process Control Facility
- Elkins Armed Forces Reserve Center
- Fifth Avenue Baptist Church
- Foodland Stores
- Gassaway Armory
- Kroger Stores
- Lewisburg Readiness Center
- Mason County 911 Center
- Moorefield Readiness Center

EDUCATIONAL EXPERIENCE

- Fairmont State College
- Fairdale Elementary School
- New River CTC
- Nitro High School
- South Charleston Middle School
- Sissonville Middle School

- Orchard Manor Fire Station
- Raleigh County 911 Center
- Randolph County 911 Facility
- Rite Aid Stores
- Silver Trees Suites Hotels
- Summersville Readiness Center
- St. Albans Armory
- St. Albans Readiness Center
- St. Johns Church
- Verizon Office Buildings
- Yeager Airport
- WV Department of Highways
- Pikeview Middle School
- Lewisburg Elementary School
- Talcott Elementary School
- West Liberty University
- Marshall University
- WV Institute of Technology





Michael Pickens



RE: ZDS Design/Consulting Services

I have had the privilege to work with ZDS Design/Consulting Services' principals and many of their staff since working at the School Building Authority in the 1990's in my roles at the School Building Authority to my current role as Executive Director of the Office of School Facilities at the West Virginia Department of Education.

When an emergency issue arose, they would immediately make themselves available to help. ZDS's principal, Todd Zachwieja, did not hesitate to board a helicopter during a weekend to help assess the damage to the State's school facilities when damaging floods occurred. Helicopters were the only way to reach many of the facilities because the roads had been washed away or were impassible. Anytime a challenging issue has arisen that no one knew how to resolve, ZDS has stepped up to solve the challenges. Their extensive engineering knowledge of energy efficient systems, HVAC, controls, lighting, power and plumbing systems has always been at the leading edge in the industry, providing innovative solutions that also minimize energy and operating costs. I have always considered their approach in engineering design and commissioning for buildings to be the best and would highly recommend them to anyone.

Their ability to work with the State Fire Marshal and other agencies – while guiding everyone to a practical design approach – always provided each project with the best value. They are much more than excellent design engineers; they also understand the importance of operating and maintaining equipment and have hands-on knowledge to troubleshoot and also commission to ensure our projects were a great success. Their combined engineering design and commission skills prove to be invaluable.

ZDS Design/Consulting Services was also selected to help the WV Department of Education and the School Building Authority in writing new codes and standards to raise the bar for the entire State. They were chosen because their projects were a success while we were having challenges with others. Todd Zachwieja was also asked to teach school facility staff members, and his reference books continue to be used today. I would always think of ZDS first whenever a challenge would occur, knowing I would get the best results possible.

I trust ZDS's staff in their technical expertise and their approach in solving challenging engineering issues and believe that anyone who uses them will be as satisfied as I have been. They are worth it!

Sincerely,

Michael E. Pickens



ELSWICK & ASSOCIATES, LLC

April 15, 2015

To Whom It May Concern:

I am distinctly honored to provide this letter of recommendation for ZDS Design/Consulting Services to your organization. I have known ZDS's principals and many of their staff since working with Ted and Todd Zachwieja at West Virginia Institute of Technology located in Montgomery, WV, from the 1970's, while I was the Physical Plant Director there. That relationship continues through today. Their knowledge of energy efficient systems related to Heating, Ventilating, and Air-Conditioning (HVAC), Building Automation Systems (BAS), lighting, power distribution, and plumbing systems has always been at the cutting edge of the industry. They have routinely provided innovative solutions to complex design challenges while minimizing energy and operating costs and enhancing maintenance efficiency. I have always considered their approach to engineering design and commissioning systems first for higher education, hospitals and schools to be superior and I would recommend them to anyone.

Throughout my career I have continued my working relationship with Ted and Todd Zachwieja and Jim Watters while I was Director of Facilities Management at Charleston Area Medical Center (CAMC), General Division, located in Charleston, WV. During that time, they provided mechanical, electrical, and plumbing (MEP), engineering, and construction administration services for all areas of CAMC's facilities. Their knowledge of health care code and practical design approach always provided the uniqueness required for the scope of the work. They understood the importance of operating and maintaining equipment and used their hands-on knowledge to ensure all our projects were on schedule and within budget. As a matter of fact, Todd led the first energy services performance contract in West Virginia. Through Todd's leadership, CAMC saved in excess of \$800,000.00 annually in energy costs and those savings were used for mechanical, electrical, and infrastructure upgrades at all three CAMC divisions. Ted, Todd, and Jim also assisted in many other projects at all CAMC divisions, including commissioning the work implemented as part of the energy savings program. Their combined engineering design and commissioning skills proved to be invaluable.

I also worked with ZDS Design/Consulting Services while I was Director of Facilities, Planning and Management at Washington & Lee University in the 1990's. They designed, acted as the construction project manager and commissioned the campus chilled water plant and distribution system to address the needs of the growing campus while fast tracking the project from start to finish in just nine months. I would always think of ZDS first whenever I was faced with a challenge, knowing that I would get the best technical expertise available.

Likewise, ZDS helped establish one of the first performance contracting programs in the State of Ohio's higher education system for Ohio University, saving the Athens campus millions annually while the savings were used for the mechanical, electrical and building automation improvements to generate the savings.

I have the utmost confidence in the technical expertise, the collaborative approach and ethical standards of ZDS Design/Consulting Services. Furthermore, these individuals are truly honorable professionals. In this regard, if you have questions or need additional information, please don't hesitate to contact me.

Sincerely,

Bill Elswick, MBA, CEO

Boyd, Gary MA, CEFP

2300 MacCorkle Ave. SE | 304 357-4871 | garyboyd@ucwv.edu

August 11, 2016

To Whom It May Concern

With well earned respect I would like to recommend ZDS as a high quality MEP design firm.

I have had multiple opportunities to work on highly technical projects with Todd Zachwieja and his team of skilled engineers. The first project that I had the opportunity to work with ZDS was a WVU project that connected several older chillers to develop a chilled water loop on the downtown campus. The project included piping through congested areas, load calculations, differential pressure and pump control, and load balancing. This project was designed to become a phased approach to a central chiller plant which is now in operation. The project was efficiently managed and the performance exceeded expectations. As the system changed and older chillers were removed from the loop, Todd always responded to questions and concerns to insure a positive outcome for the overall objective.

At present I am working with ZDS on a University of Charleston project constructing a new Innovation Center and Athletic Complex. ZDS has accommodated many twist and changes to this project. We are on track to open the new facility in December of this year. I have found Todd and his team to be highly responsive and professional.

Sincerely,

Boyd, Gary MA, CEFP Director of Facilities University of Charleston

Dary X. Bayo

February 1, 2016

To:

Whom It May Concern

From: David B. Weekley, Director of Student Support Services Way Billies

RE:

ZDS Design/Consulting Services

We have had the privilege of working with ZDS Design/ Consulting Services on construction projects for Ritchie County Schools. The first project was at Ritchie County Middle/High School. This was on an emergency basis with school closed due to indoor Air Quality issues with which all parties were struggling to determine the cause. ZDS promptly came to our need, assessed the issues, and identified solutions that helped immediately re-open the school. They developed a long-term plan while providing the design and construction administration services which solved the complex issues within the school. This job was ultimately completed to the satisfaction of all parties involved.

Ritchie County Schools had yet another opportunity to work with ZDS on the Smithville Elementary Addition and Renovation project. The professionalism exhibited by ZDS allowed their part of this project to progress smoothly and efficiently. Our community is still very proud of the facility they received.

ZDS Design/ Consulting Services works well with the West Virginia Department of Education, the School Building Authority, State Fire Marshal, and other agencies as needed. This has proven invaluable to Ritchie County Schools. They were very responsive to any issues raised and often offered ideas or suggestions that greatly benefit Ritchie County Schools. They are also very responsive long after these projects have been completed, helping our staff when requested in a prompt, professional manner.

I trust the staff of ZDS and their practical approach to solving challenging facility issues in both new construction and renovations. I would highly recommend ZDS Design/ Consulting Services as they are an exceptional company that is willing to do what it takes to provide a quality job.



Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Centralized Expression of Interest

02 - Architect/Engr

Proc Folder: 319512

Doc Description: A/E Services for Boiler Replacement at Blackwater Falls SP

Proc Type: Central Contract - Fixed Amt

Date Issued Solicitation Closes Solicitation No Version 2017-04-04 2017-05-04 CEO 0310 DNR170000003 13:30:00

END RECEIVING CO-A HOR

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

US

Vendor Name, Address and Telephone Number:

ZDS Design/Consulting Services 281 Smiley Drive St. Albans, West Virginia 25177 (304) 755-0075

FOR INFORMATION CONTACT THE BUYER

Guy Nisbet (304) 558-2596 guy.l.nisbet@wv.gov

3ignature X

FEIN#

550735995

DATE May 4, 2017

All offers subject to all terms and conditions contained in this solicitation

Page: 1

FORM ID: WV-PRC-CEOI-001

ADDITIONAL INFORMATION:

Expression of Interest (Engineering Services).

The WV.Purchasing Division is soliciting Expression(s) of Interest for the Agency, The Division of Natural Resources rom qualified firms to provide architectural/engineering services as defined herein.

PROJECT: The mission or purpose of the project for which bids are being solicited is to provide necessary engineering, and other related professional services to design as well as provide construction contract administration services to replace the existing gas boilers and related work at the Blackwater Falls State Park Lodge. The project will include the design and specification of all necessary improvements to the building to accommodate these new boilers, flue and required plping.

*Online submissions are prohibited for Expression of Interest *

INVOICE TO		
	SUPERINTENDENT	
DIVISION OF NATURAL RESOURCES	DIVISION OF NATURAL RESOURCES	5
PARKS & RECREATION-PEM SECTION	BLACKWATER FALLS STATE PARK	
324 4TH AVE	1584 BLACKWATER LODGE RD	
SOUTH CHARLESTON WV25305	DAVIS	WV 26260-0490
us	us	

Line	Comm Ln Desc	Qty	Unit Issue	
1	Mechanical engineering			

Comm Code	Manufacturer	Specification	Model #	
81101600				
01101000				

Extended Description:

A/E design services and construction administration for boiler replacement at Blackwater Falls SP Lodge.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.
Lodd C. Solwieja
(Name, Title)
Todd A. Zachwieja, PE, CEM, LEED AP CEO, Principal in Charge
(Printed Name and Title)
281 Smiley Drive, St. Albans, WV 25177
(Address) 304-755-0075, 304-755-0076
(Phone Number) / (Fax Number)
todd.zachwieja@zdsdesign.com
(email address)
CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.
ZDS Design/Consulting Services
Company) Lorda a Rochineja
Authorized Signature) (Representative Name, Title)
Todd A. Zachwieja, PE, CEM, LEED AP CEO, Principal in Charge
Printed Name and Title of Authorized Representative)
May 4, 2017
Date)
304-755-0075, 304-755-0076 Phone Number) (Fax Number)
anne Numberi (Fox Number)

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

ved)
Addendum No. 6 Addendum No. 7 Addendum No. 8 Addendum No. 9 Addendum No. 10
ot of addenda may be cause for rejection of this bid tation made or assumed to be made during any oral stives and any state personnel is not binding. Only to the specifications by an official addendum is
Services
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ould be submitted with the bid to expedite

document processing.

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Nam	ZDS De	sign/Consulting Sei	rvices			
Authorized Sig		Todal a	orlineja	Date:	May 4, 2017	
State of	Kanawha					
County of	West Virginia	, to-wit:				
Taken, subscr	ibed, and sworn	to before me this 4	_day of	May	. 20 17	
My Commission	on expires	May 21	, 20 20			
AFFIX SEAL I	HERE		NOTARY PL	BLIC DI	unM.A	Jeek

NOTARY PUBLIC OFFICIAL SEAL
LAUREN M. MEEK
State of West Virginis
My Commission Expires May 21, 2020
36 GERONIMO DRIVE ST. ALBANS WY 25/177

Purchasing Attidavit (Revised 08/01/2015)